



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/629,207

07/29/2003

Johathan Lee

13935US02

5674

23446 7590 10/17/2008
MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER

RAHMAN, FAHMIDA

ART UNIT

PAPER NUMBER

2116

MAIL DATE

DELIVERY MODE

10/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/629,207	Applicant(s) LEE ET AL.	
	Examiner FAHMIDA RAHMAN	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2116

DETAILED ACTION

1. This final action is in response to communications filed on 6/19/08.
2. Claims 1-28 have been cancelled and no new claims have been added.
3. Claim 29 has been amended.
4. Claims 29-33 have been pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 29-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 29 recites the limitation "wherein battery usage is possible with AC power". However, that limitation is not supported by the disclosure.

Claims 30-33 depend on claim 29 and they also fail to comply with 35 USC 112.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 recites the limitation "AC power" in line 13. It is not clear whether it is same or different from "AC power" recited in line 6. For the rest of the action, it is assumed that same relationship was intended.

Claims 30-33 depend on claim 29. Thus, they carry the same ambiguity.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2116

5. Claims 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge (US Patent 6633769), in view of Mills (US Patent 6795450), further in view of Kobayashi et al (US Patent Application Publication 2003/0045327).

For claim 29, Shoobridge teaches the following limitations:

A method for optimizing power consumption in a communication system (lines 5-10 of column 2) **comprising: detecting an amount of traffic** (lines 33-47 of column 5 mention about checking whether communication is absent for a predetermined time. Thus, amount of traffic, which may be zero or non-zero, is detected), **a link** (lines 19-37 of column 2 mention that communications between two devices is established through connection, or link. Thus, link is detected first before any communication), **battery usage** (lines 32-47 of column 5) **and a power state of the communication system** ("normal mode" and "enhanced mode" as mentioned in lines 65-67 of column 2); **and selecting at least one power management from a plurality of power management states state** (sleep/suspend 440, hot/wake-up 460 mentioned in lines 24-40 of column 8; wake-up can further be classified as: wake-up with deinsertion/insertion event, wake-up without deinsertion/insertion event, communication session between two devices is another power management state; lines 8-15 of column 7 and lines 45-48 of column 7) **based at least in part on said detection of the amount of traffic** ("sleep mode" is selected when traffic is zero as mentioned in lines 40-47 of column 5), **the detection of the battery usage** ("sleep" when

Art Unit: 2116

battery module fail as mentioned in lines 33-47 of column 5) **and the detection of the power state** (the “hot mode” or wake-up of normal mode is different from that of enhanced mode. Lines 8-15 of column 7 and lines 45-48 of column 7 mention that enhanced mode does not create some de-insertion/insertion events on a resume of a device, which is performed in normal mode. Therefore, the type of wake-up depends on whether the device is in normal mode or enhanced mode).

Shoobridge does not explicitly mention about absence of AC power, although the hand held portable device is powered by battery (lines 33-47 of column 5). There is no mention about the absence of AC power in mobile although it is mentioned that the mobile device can roam from cell to cell (lines 54-65 of column 1). It is well known that mobile device roaming from cell to cell is typically driven by battery with an absence of AC power. Kobayashi teaches a method where battery usage is possible with AC power and battery usage is detected with an absence of AC power (Fig 1, Fig 4- Fig 6; [0020]; [0047]; battery is charged with AC power, which provides battery usage with AC power).

It would have been obvious for one ordinary skill in the art at the time the invention was made to use the mobile without AC power, since powering a portable device by battery with absence of AC power provides ease of use and simplicity in design. In such a case, detection of battery usage is same as the detection of battery usage with an absence of power.

Art Unit: 2116

Shoobridge, in view of Kobayashi, does not explicitly mention that selection of power management state can be based on detection of link. Mills teaches a system where a power management state is selected based on the detection of link (Figure 3 shows that 300 is selected if link is not detected and lines 30-35 of column 8 mention that partner will reset if link is not detected; lines 40-65 of column 17).

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Shoobridge, Kobayashi and Mills. One ordinary skill would be motivated to have a power management state based on detection of link, in addition to the power management provided by Shoobridge and Kobayashi, since such an option provides a better power management as explained in Mills (lines 55-65 of column 17; lines 45-60 of column 10 of Mills). Thus, power management based on link state can additionally reduce power to the system.

For claim 30, low power mode in Shoobridge is selected when there is no traffic (lines 40-47 of column 5).

For claims 31, 32, 33, Mills teaches detecting intensity, or amount of traffic (lines 60-67 of column 9). The network can detect full high-bandwidth communication and limited communication. There is a threshold for comparison to figure out what amount of communication is high-bandwidth communication. The amount of

Art Unit: 2116

traffic is approximated to at least full bandwidth communication and limited communication. For limited communication, power is scaled down.

Response to Arguments

Applicant's arguments filed on 6/19/08 have been considered but they are moot in view of new grounds of rejection.

Conclusion

Prior art made of record but not relied upon:

Konaka (US Patent Application Publication 2001/0021981) teaches a method where power management state is selected based on link detection and amount of traffic detection ([0114] and [0121]).

Gaur (US patent Application Publication 2003/0088797) teaches a method of selecting power management state based on battery usage with an absence of AC power (Fig 2).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and

Art Unit: 2116

the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fahmida Rahman whose telephone number is 571-272-8159. The examiner can normally be reached on Monday through Friday 8:30 - 5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2116

/Fahmida Rahman/
Examiner
Art Unit 2116

/Thomas Lee/

Supervisory Patent Examiner, Art Unit 2115